

Prof. Jatish Chandra Sengupta

A Prodigy of learning and a paragon of Virtue

Centuries come and centuries go. We, too come and go along with the centuries. But time does not honour the hoipolloi. Still there are some who stand out because of their virtues, on account of their achievements. We offer our homage to them and love to remember them always. And we come out with our very special reverence when such persons complete, posthumously though in most cases one hundred years or a century since the day of their birth. We celebrate the centennial anniversary, our heart filled with gratitude, for the contributions they made and enriched the human civilization thereby. Prof. Jatish Chandra Sengupta, Bengal's gift to the rainbow world of Botany is one of them.

Prof. J. C. Sengupta saw the light on December 15, 1900 at the village of Outshahi in Dhaka, now the Capital City of the Republic of Bangladesh. His father Satish Chandra served the Railways. Surama, his mother was an enlightened lady who inspired and influenced Sengupta as a young boy.

Jatish Chandra had his schooling in Dhaka. He passed the Matriculation examination of the Calcutta University in 1917 with flying colours. He, then, joined the Bangabasi College in Calcutta from where he graduated in 1921 with Botany as one of his major disciplines. At Bangabasi the teaching of the eminent botanist Acharya Girish Chandra Bose left its impress

Madan Mohan Bhattacharya*

upon Sengupta. In 1921 Sengupta got himself admitted to the M.Sc. course in Botany of the Calcutta University. In 1923 he obtained his Post Graduate degree and was placed in the First class. He was the recipient of the University Gold Medal and prize for the said year. He was also awarded a University Research Scholarship to take up research work under the supervision of Prof P. Brühl who headed the Department of Botany at Calcutta then. He was engaged in researches mainly on the biology, pollination, fruit setting and germination behaviour of water hyacinth.

Having obtained his doctorate degree in Botany from Calcutta, Jatish Chandra left India in September, 1926 for Germany where he joined the Plant Physiology Laboratory of the University of Heidelberg. At Heidelberg he researched for nearly two years on rheotropism in plants under the guidance of the renowned plant physiologist Dr. Ludwig Jost, for which Sengupta was admitted to the Dr. Phil. Nat degree in 1928.

On his return to India Sengupta joined the Presidency College, Calcutta in 1929 as Professor of Botany. A decade after in 1939 Dr. Sengupta rose to the Post of Senior Professor and Head of the Botany Department. It was in 1950 that Dr. Sengupta was appointed Principal of the College and continued in this capacity till 1955 when he joined under the Govt. of India as the Chief Botanist of the Botanical Survey of India. One remembers that it was with Dr. Sengupta at the helm that the Presidency College observed its centenary celebrations in 1955, which was presided over by the then President of India Dr. Rajendra Prasad who had also been an alumnus of the College. He was the chief architect of the Alumni Association, Presidency College Calcutta and was the first Secretary of the Association. It is a pleasure and privilege that the Alumni Association, Presidency College has been celebrating his birth centenary at the dawn of this new Millennium.

He adorned various of the posts either as Administrator or as Fellow; served on the committees and Governing Bodies of as important organisations as State Agricultural Research Committee, State Board of Wild Life of West Bengal, Indian Museum, Birla Industrial and Technological Museum, Bose Institute, and the like. After his retirement in 1967 he joined the Department of Botany, Calcutta University under the, Retired Scientists' aid scheme of the Council of Scientific and Industrial Research. Dr. Sengupta carried on research work in multiple disciplines and carried out teaching at the post graduate classes in Botany of the Calcutta University's Science College at Ballygunge till he breathed his last on January 21, 1969, all of a sudden when his students were waiting for him to conduct their M. Sc Plant Physiology Practical Examination.

Dr Sengupta had unique personal qualities. Basically he had acute love for plants and the plants in return showered him with multiple prizes. He was a fine Sportsman and this gave him a good physique and an unparallel temperament—he was tough as an administrator but was soft and generous towards his colleagues and students. His wonderful handwriting; hearty hospitality; honest, straight forward but sympathetic treatments in the office and his warm personality are still the matters one remembers instantly.

Dr. Sengupta was associated with various scientific societies in India and abroad and his scientific pursuits were duly recognised by his being elected as a Fellow of the National Institute of Sciences of India and President of Botany Section of Indian Science Congress Association in 1955; he was the president of the establishments like Botanical Society of Bengal, Indian Science News Association, Indian Society of Plant Physiology and was the Secretary of the Indian Society of Soil Science. He was intimately connected with the Asiatic Society, as the Biological Secretary. He had a very wide area of research activities and the enclosed list of his works justifies the multiple parameters he had used with skill. Professor Sengupta passed away three decades ago. But time has failed to smother his memories. He is remembered not only for his erudition but also for his heart which was full of love and affection for whoever came in his contact. He believed in loving and being loved.

Synopsis of scientific contributions of Prof. J. C. Sengupta :

1923. (With BRUHL P) Contributions to the knowledge of Indian Slime fungi (Myxomycetes). *J. Dep. Sci. Calcutta University* 4.
1927. (With BRUHL P) Commentationes phytomorphological et Phytosociological IV. *Eichhornia* Studies III. On the production or ripe seeds by artificial pollination of *Eichhornia species*. *J. Dept. Sci. Calcutta University*, 8, 1-8.
1929. Untersuchungen user Rheotropismus. *Zeitschr. Fuc Botanik*.
1935. Die osmotische verhaltnisse beieinigen Pflanzen in Bengal (Indian). *Ber. d. Deutsch Bot. Ges.*, 53, 783-795.
1937. An insectivorous plant in Bengal. *Sci. Cult.*, 3, 97-99.
1938. Investigation of the annual variation of the water content, osmotic values and chloride fractions of some plants in Port Canning, near Calcutta. *150th Anniversary Vol. Roy. Bot. Garden*, 265-294.
1939. Uber die osmotische werte und den Chloridanteil in Pflanzen einiger Salazgebiete, Bengal (Indian). *Ber. d. Deutsch Bot. Ges.* 56, 474-785.
— Der histochemische nachweis von Natrium bei einigen Pflanzen in Bengal (India). *Ber. d. Deutsch Bot. Ges.* 56, 486-494.
1944. (With SEN N K) Studies on the Physiology of Jute, *Sci. Cult.*, 9, 503-504.
— (With SEN N K) Studies on the Physiology of Mustard. *Curr. Sci.* 13, 160-161.
1946. (With SEN N K) Photoperiodism in Jute, *Nature*, 157, 655-656.
— (With SEN N K) On Photoperiodic effects of Jute plants. *J. Indian Agric. Sci.*, 14, 196-202.
1947. (With PAIN S K) Leaf heteromorphism and photoperiods in *Sesamum orientale* L. *Nature (Lond.)* 160, 510.

- Variation of osmotic values in Jute plants. *J. Indian Bot. Soc.*, **26**, 157-175.
- (With SEN N K) Investigations on the early flowering of jute (*Corchorus olitorius* L.) *J. Indian Bot. Soc.*, **26**, 41-49.
- (With SEN N K) Photoperiodic effect on *Sesamum indicum* Linn. *Sci. Cult.*, **13**, 203-204.
- 1948. (With SEN N K And Mukherjee D K) Effect of sowing time on growth and development of jute II. *J. Indian Agric. Sci.* **18**, 184-185.
- (With SEN N K) Effect of sowing time on growth and development of jute. I. *Bull. Bot. Soc. Bengal*, **2**, 41-49.
- 1949. (With MUKHERJEE D K) Studies on the physiology of growth and development of Mung (*Phaseolus aureus*). *Indian J. Agric. Sci.* **19**, 207-254.
- (With PAIN S K) Effect of time of sowing and presowing cold treatment on the growth and development of tobacco plants (*Nicotiana tabacum* L. and *N. rustica* L.) *Bull. Bot. Soc. Bengal*, **3**, 73-97.
- 1950. Some experiments on the transmission of the photoperiodic stimulus by grafting in jute. *Proc. Indian Sci. Congr. (Bot.)*, **37** (III), 61.
- Consolidated report of the work of the scheme of research on the physiology of pulses (Mung and Lentil) at Presidency College for the Year 1947-48, 1948-49, and 1949-50, Calcutta.
- (With MUKHERJEE D K) Effect of sowing time on growth and development of jute. II. *Indian J. Agric. Sci.*, **20**, 129-136.
- (With MUKHERJEE D K) Studies on the physiology of growth and development of Mung (*Phaseolus aureus* Roxb.) (a) effect of sowing time (b) vernalisation and photoperiodism. *Indian J. Agric. Sci.*, **20**, 207-254.
- (With SAHA J R) Effect of sowing time and photoperiods in *Sorghum roxburghii* var. Lians Stapf (Jowar). *Nature*, **166**, 75-76.
- (With SEN G) Photoperiodic induction in jute and a great acceleration of vegetative growth in *C. capsularis*. *Nature*, **166**, 152.
- (With SEN G) Effect of shortening of the daily light period in the morning and in the evening in short day treatment of Jute. *Curr. Sci.*, **19**, 184-185.
- (With SEN G) Effect of photoperiodic treatment on the dates of sowing on the formation of fruits in jute. *Sci. Cult.*, **16**, 116-119.
- 1952. Study and research in Plant physiology with reference to tropical plants. *Bull. Botan. Soc. Bengal*, **6**, 33-39.
- (With SEN G) Further investigations on the photoperiodic effect in jute. *Indian J. Agric. Sci.*, **22**, 1-31.
- 1953. Some aspects of recent studies on plant growth substances. *Bull. Bot. Soc. Bengal*, **7**, i-xii.
- Studies on the physiology of jute plants. I Effect of time of sowing and vernalisation on growth and development of jute plants. *Agric. Res. Memoir* No. 6. Indian Central Jute Committee.
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- (With CHATTOPADHYAY S K) Effect of treatment with hormones on the setting of fruits and induction of seedlessness. *Proc. Indian Sci. Cong. Assoc.*, **41**, (III), 159.
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- (With CHATTOPADHYAY S K) Hormones and rooting in intact plants and cuttings. *Curr. Sci.*, **23**, 294-295.
- (With GUHA THAKURTA P) *Intern. Bot. Congr. Paris Abs.* **11**, 332.
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- 1961. (With GUHA BAKSHI D N) Hormones and rooting in cuttings of some economic plants. *Bull. Bot. Soc. Bengal*, **15**, 1-3.
- 1962. (With SAHA J R) Effect of sowing time and photoperiods in groundnut-Type AH-25 (Spreading) *Sci. Cult.*, **2**, 390-392.
- 1965. (With SAHA J R) Effect of sowing time and photoperiods on the growth and development of *Hibiscus cannabinus* (Mesta). *Bull. Bot. Soc. Bengal*, **19**, 3-9.
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